Cat. No. 14-1164

OWNER'S MANUAL

Please read before using this equipment.

Micro-37

Voice-Activated Microcassette Tape Recorder

OPTIMUS®
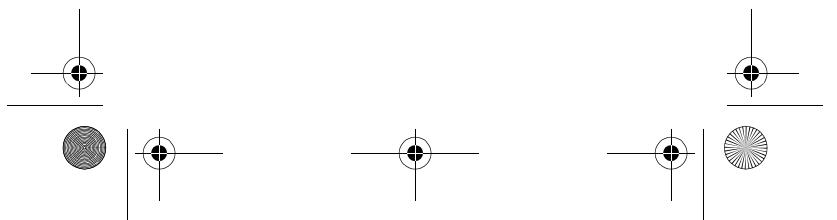
FEATURES

Your Optimus Micro-37 Voice-Activated Microcassette Tape Recorder is ideal for quick note-taking. Its ultra-small size makes it easy to slip into a pocket or brief-case. You can use it at school, at business conferences, for dictation in the office, or anywhere on the go! You can start record-ing manually or set the recorder so sound activates recording.

Your recorder includes these features:

Voice-Activation Circuitry (VOX) — be-gins recording when the recorder picks up sound and stops a few seconds after the sound stops.

Tape Counter with Reset Button — lets you mark the locations of certain sections of tape so you can easily return to them.

Built-In Microphone and Speaker — let you record and play back notes anywhere.
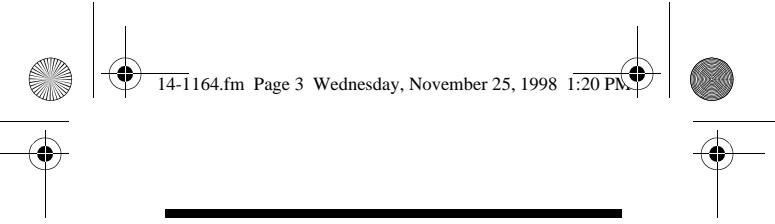
External Microphone Jack — lets you use an external microphone, so you can extend your recording range.

Earphone Jack — lets you use an optional earphone to listen to a tape privately.

Quick Record — lets you instantly change from playback to record.

Tape Speed Switch — lets you record at normal or slow speed. Slow speed gives you twice the normal recording time.

Fast Play — lets you play a tape back about 25% faster than normal speed, to save time when listening to a tape.

Auto Stop — stops automatically when the tape reaches the end during recording and playback.

Automatic Level Control (ALC) Circuit — automatically sets the recording level.

Power Options — let you power the recorder from internal batteries, AC power (with an optional AC adapter), or vehicle battery power (with an optional DC adapter).
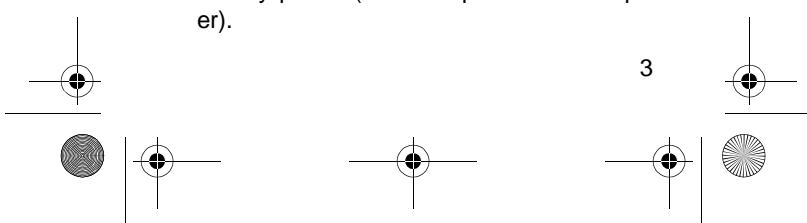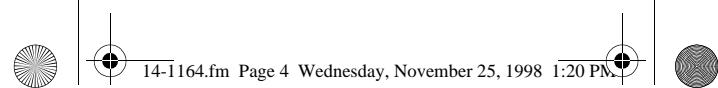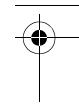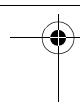
We recommend you write your recorder's
serial number here. The number is inside
the recorder's battery compartment.

Serial Number: _____

CONTENTS

PREPARATION

BEFORE YOU BEGIN

To protect the Micro-37 during shipment, a piece of paper is attached to the cassette door. Remove this paper before you use the Micro-37.

CONNECTING TO POWER

You can power your Micro-37 from any of the following:

- Internal battery power

- AC power (with an optional AC adapter)

- Your vehicle's battery (with an optional DC adapter)

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Using Batteries

You can use two AA batteries (not supplied) to power your Micro-37. We recommend alkaline batteries, such as RadioShack Cat. No. 23-552.

Cautions:

- Use only fresh batteries of the required size and recommended type.

- Never leave dead or weak batteries in the Micro-37. Batteries can leak chemicals that can destroy electronic circuits.

- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

- Dispose of old batteries promptly; do not bury or burn them.

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Follow these steps to install batteries.

1. Slide the battery compartment cover in the direction of the arrow until it stops, then lift up the cover.
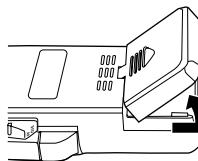
Caution: The battery compartment cover is attached to the recorder. Do not try to remove it.

2. Insert the batteries into the compartment as indicated by the polarity symbols (+ and −) marked inside the compartment.
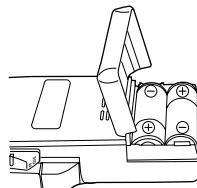
3. Close the battery compartment cover by pressing it down and sliding it in the opposite direction of the arrow.

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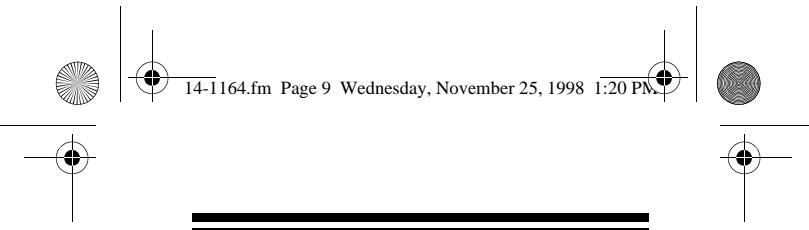
Notes:

- If the record/battery indicator to the right of the **EAR** jack does not light or lights dimly during manual recording, replace the batteries.

- If you do not plan to use the Micro-37 for several days, or if you plan to use only AC or vehicle battery power, remove the batteries.

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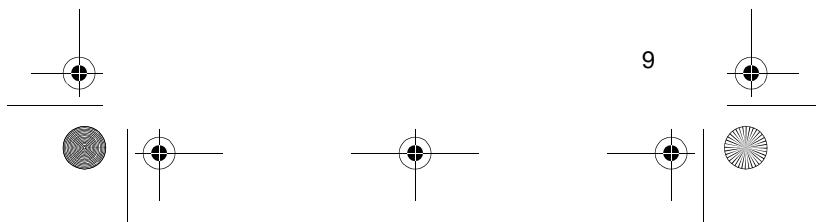
Using AC Power

To power the Micro-37 from an AC outlet, you need an AC adapter (not supplied), such as Cat. No. 273-1654B.

Cautions:

- You must use an AC adapter that supplies 3 volts DC power and delivers at least 200 milliamps. The center tip of the adapter barrel plug must be set to positive, and the plug must properly fit the Micro-37's **DC3V** jack. The recommended AC adapter meets these specifications. Using an AC adapter that does not meet these specifications could damage the Micro-37, the AC adapter, or the plug.

- Always connect the AC adapter to the Micro-37 before you plug it into the AC outlet, and unplug the adapter from the AC outlet before you unplug it from the Micro-37.

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Follow these steps to power the Micro-37 from standard AC power.
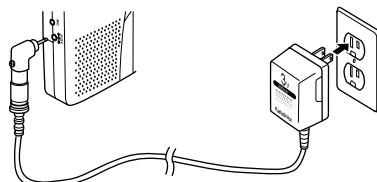
1. Set the AC adapter's voltage switch to 3V.

2. Attach the 2.35 mm outer diameter/0.7 mm inner diameter barrel plug to the AC adapter's cord with the tip set to positive (+).

3. Insert the barrel plug into the Micro-37's **DC3V** jack. This disconnects internal batteries.

4. Plug the other end of the AC adapter into a standard AC outlet.

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Using Vehicle Battery Power

To power the Micro-37 from your vehicle's battery, you need a DC adapter (not supplied), such as Cat. No. 270-1560.

Cautions:

- You must use a DC adapter that supplies 3 volts DC power and delivers at least 200 milliamps. The center tip of its barrel plug must be set to positive, and the plug must properly fit the Micro-37's **DC3V** jack. The recommended DC adapter meets these specifications. Using a DC adapter that does not meet these specifications could damage the Micro-37 or the DC adapter.

- Always plug the DC adapter into the Micro-37 before you plug it into the cigarette-lighter socket, and unplug the adapter from the cigarette-lighter socket before you unplug it from the Micro-37.

Follow these steps to power the Micro-37 from your vehicle's battery.
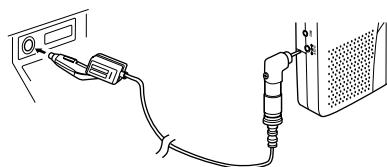
1. Set the DC adapter's voltage switch to 3V.

2. Attach the 2.35 mm outer diameter/0.7 mm inner diameter barrel plug with the tip set to positive (+).

3. Insert the barrel plug into the Micro-37's **DC3V** jack. This disconnects the internal batteries.

4. Plug the other end of the DC adapter into the vehicle's cigarette-lighter socket.

CONNECTING AN EARPHONE

You can use an optional mono earphone with a submini ($^3/_{32}$-inch) plug to listen to a tape in privacy.

Notes:

- You can also use an earphone to monitor what the recorder picks up through the internal microphone or an external microphone.

- Your local RadioShack store carries a wide selection of earphones.

Insert the earphone's plug into the recorder's **EAR** jack. The built-in speaker automatically disconnects.

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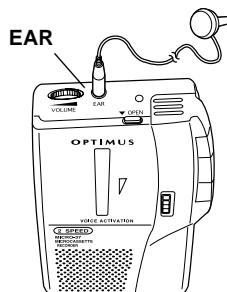
Listening Safely

To protect your hearing, follow these guidelines when you use an earphone.

- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable listening level.

- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.

- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

Traffic Safety

Do not wear an earphone while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and could be illegal in some areas.

Even though some earphones let you hear outside sounds when listening at normal volume levels, they still can present a traffic hazard.

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CONNECTING AN EXTERNAL MICROPHONE

You can use an optional microphone with a submini ($3/32$-inch) plug to extend the recording range. Your local RadioShack store carries a wide selection of microphones.

Insert the microphone's plug into the recorder's **MIC** jack. The built-in microphone automatically disconnects.


MIC Jack

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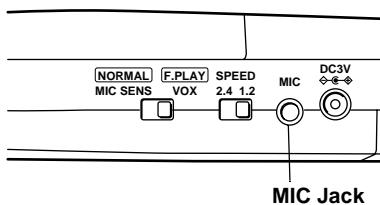
OPERATION

LOADING A MICROCASSETTE TAPE

Note: We recommend MC-60 microcassette tapes for up to 2 hours of recording/playback time, or MC-90 microcassette tapes for up to 3 hours of recording/playback time.

Follow these steps to load a microcassette tape.

1. Use a pencil to turn the cassette's hub and remove any tape slack. Avoid touching the tape.

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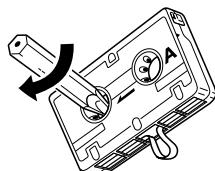
2. Lift the latch to open the cassette com-
partment door.

Latch
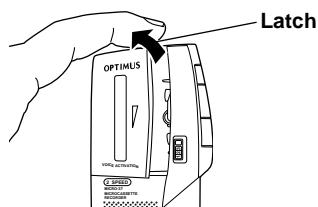
3. Insert the microcassette into the door's
guides so the microcassette's open
edge faces out.
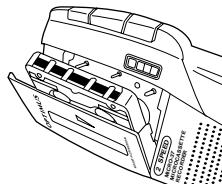
Note: An arrow on the cassette com-
partment shows the tape travel direc-
tion. Be sure the tape's full reel is in
the opposite direction from the arrow.

4. Close the door.

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RECORDING

You can record manually or use voice-activated recording. When you use the voice activating feature, recording begins when the recorder picks up sound and stops a few seconds after the sound stops.

Follow these steps to record.

1. Load the microcassette tape.

2. Set **SPEED** on the side of the recorder as follows:
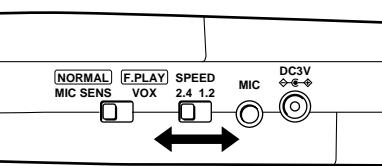
- To double the tape's recording/playback time, set **SPEED** to **1.2**. This setting allows 120 minutes of total recording/playback time on an MC-60 tape, or 180 minutes on an MC-90 tape.

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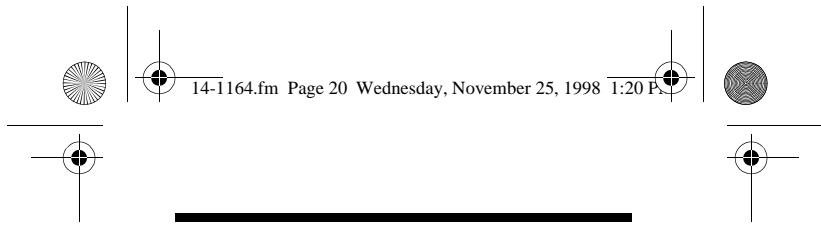
• For better sound quality, set **SPEED** to **2.4**. This setting allows 60 minutes of total recording/playback time on an MC-60 tape, or 90 minutes on an MC-90 tape.

3. Set **MIC SENS/VOX** as follows:
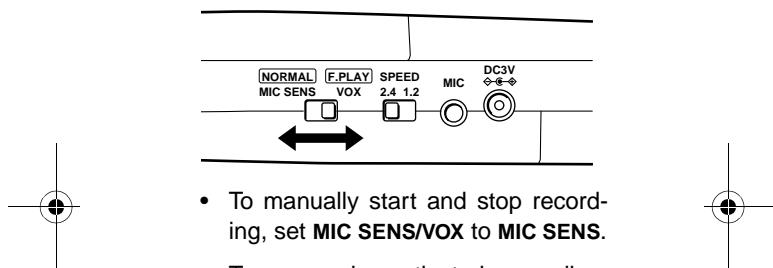
• To manually start and stop recording, set **MIC SENS/VOX** to **MIC SENS**.

• To use voice-activated recording, set **MIC SENS/VOX** to **VOX**.

Note: The voice-activated feature saves power and tape if there are long or frequent pauses in the material you are recording.

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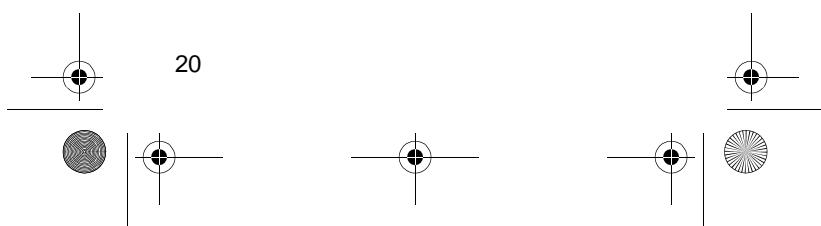
4. Press **REC** to begin recording. Both **REC** and **PLAY** lock down, and the record/battery indicator to the right of the **EAR** jack lights.
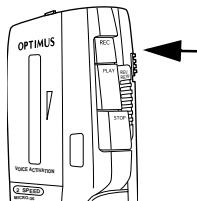
If **MIC SENS/VOX** is set to **MIC SENS**, recording begins immediately. If **MIC SENS/VOX** is set to **VOX**, recording begins and the record/battery indicator lights steadily only when the recorder picks up sound.

Caution:

- To protect the recorder, press **REC** only when a microcassette tape is loaded.

- Do not force down **REC**. If you can-not easily press **REC**, check the microcassette tape's erase-protection tabs (see "Preventing Accidental Erasure" on Page 27).

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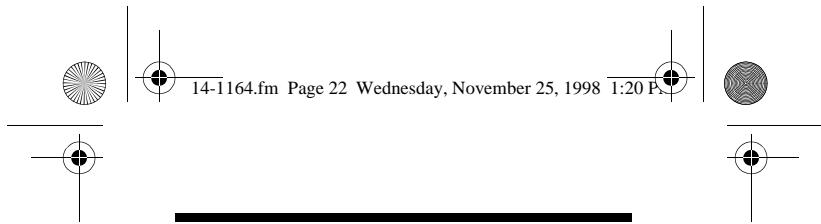
> **Note:** To pause recording, slide **PAUSE/OFF** to **PAUSE**. To resume recording, slide **PAUSE/OFF** to **OFF**.

5. If you set **MIC SENS/VOX** to **VOX**, adjust **VOLUME** to set the sound level at which recording begins. The higher the **VOLUME** setting, the lower the sound level needed to start **VOX** recording.

   If you set **MIC SENS/VOX** to **MIC SENS**, adjust **VOLUME** to set the desired monitoring sound level.

6. Press **STOP** to stop the tape.
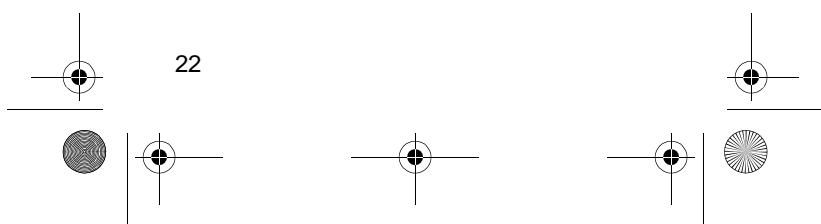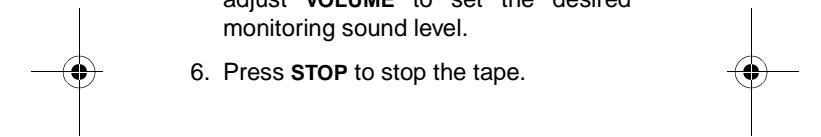
PLAYING A TAPE

1. Load the microcassette tape.

2. Set **SPEED** to the speed used when the tape was recorded.

3. To listen to the tape at normal speed, set **NORMAL/F.PLAY** to **NORMAL**.

   To listen to the tape at about 25% faster than normal speed, set **NOR-MAL/F.PLAY** to **F.PLAY**.

4. Press **PLAY**.

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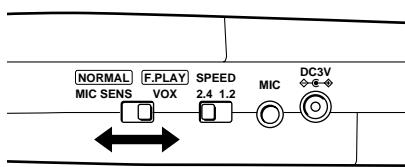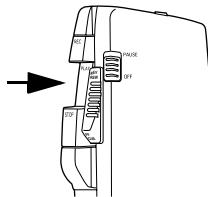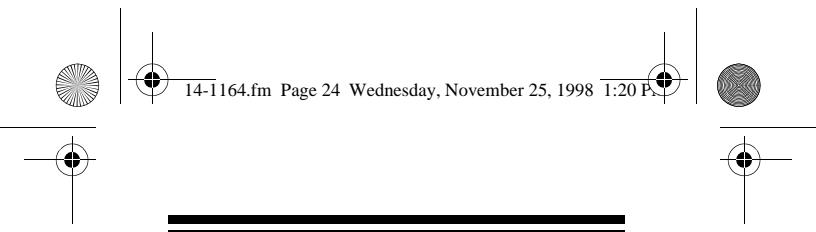
5. Adjust **VOLUME** to a comfortable lis-
   tening level.
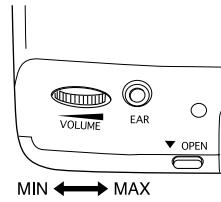
6. Press **STOP** to stop playback.

Rewinding/Fast-Forwarding
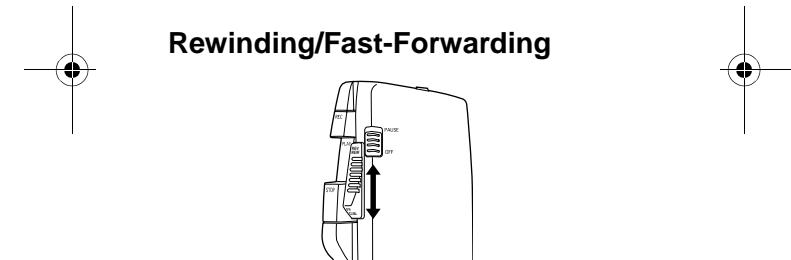
Slide **REV REW/FF CUE** to **REV REW** to rap-
idly rewind a tape, or to **FF CUE** to fast-for-
ward a tape.

To slide **REV REW/FF CUE** to the desired
position, press the side of the switch oppo-
site the side marked with the desired direc-
tion.

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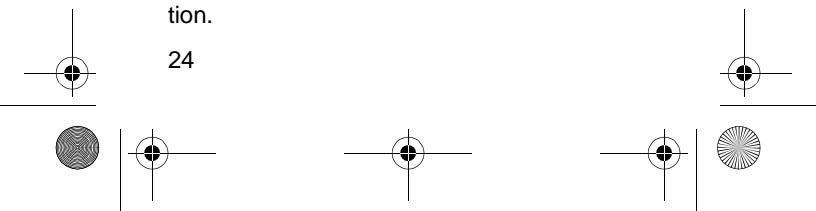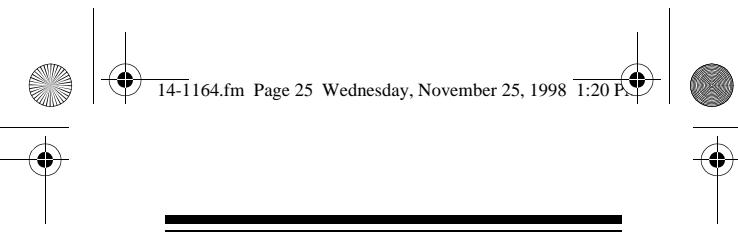
Caution: To protect the tape-handling parts, press **STOP** or slide **REV REW/FF CUE** to the center when the tape reaches the end.

If you slide **REV REW/FF CUE** to **REV REW** or **FF CUE** during playback, you can hear the tape at a faster speed as it fast-forwards or rewinds. When you release the switch, the recorder resumes normal playback.

QUICK RECORD

During playback, you can press **REC** to go directly to recording without pressing **STOP** first.
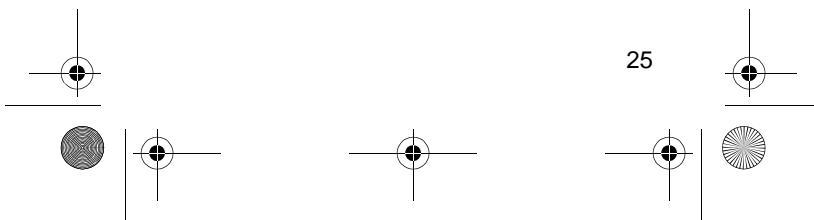
USING THE TAPE COUNTER

You can use the tape counter to mark locations of specific sections of tape so you can easily return to them.
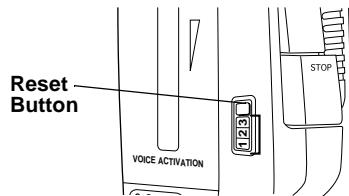
Reset Button

Press the reset button next to the tape counter to set the counter to **000** at the beginning of a tape. As the tape plays or records, note the counter reading at the position(s) to which you want to return.

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TAPE TIPS

STORING CASSETTE TAPES

Do not expose microcassette tapes to high temperatures, high humidity, dust or dirt, or motors, transformers, or other sources with strong magnetic fields.

PREVENTING ACCIDENTAL ERASURE

Most microcassette tapes have an erase-protection tab for each side of the tape. To protect your recordings from being accidentally erased or recorded over, use a screwdriver to carefully break off the erase-protection tabs.

Side A Tab
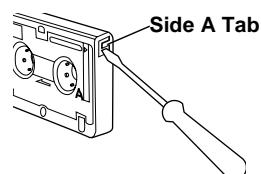
If you later decide to erase or record over the tape, place a piece of strong tape over the holes.

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Caution: Removing the erase-protection tabs does not prevent a tape from being erased by a bulk tape eraser.

ERASING A CASSETTE TAPE

If you no longer want a recording, you can record over it or erase it.
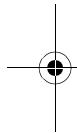
To record over a microcassette tape, be sure the erase-protection tabs are in place. Then simply record as usual. The recorder records over the previous recording.
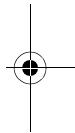
You might prefer to use a bulk tape eraser, such as Cat. No. 44-232, which erases both sides of a tape in just a few seconds.
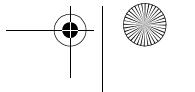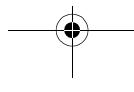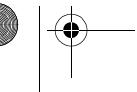
CARE

Your Optimus Micro-37 Voice-Activated Microcassette Tape Recorder is an example of superior design and craftsmanship. The following suggestions will help you care for your recorder so you can enjoy it for years.

- Keep the recorder dry. If it gets wet, wipe it dry immediately. Liquids can contain minerals that can corrode the electronic circuits.

- Handle the recorder gently and carefully. Dropping it can damage circuit boards and cases and can cause the recorder to work improperly.

- Use and store the recorder only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.

- Keep the recorder away from dust and dirt, which can cause premature wear of parts.

- Wipe the recorder with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean it.

Modifying or tampering with the recorder's internal components can cause a malfunction and might invalidate the recorder's warranty. If your recorder is not operating as it should, take it to your local RadioShack store for assistance.

CLEANING THE TAPE-HANDLING PARTS

Dirt, dust, or particles of the tape's coating can accumulate on the tape heads and other parts that the tape touches. This can greatly reduce the performance of the recorder. Use the following cleaning procedure after every 20 hours of recorder operation.

1. Press **STOP**, remove the batteries, and disconnect any other power source.

2. Press **PLAY** to expose the tape-handling parts.

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3. Use a cotton swab dipped in tape head cleaning solution or denatured alcohol to gently clean the record/playback head, pinch roller, capstan and tape guides.

Tape Guides   **Record/Playback Head**

Pinch Roller   **Capstan**
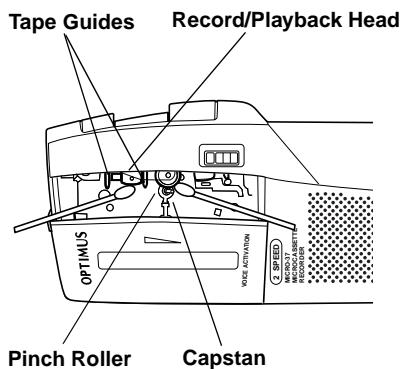
4. Press **STOP** to release the tape-handling parts. Then close the cassette compartment cover and reconnect power.

Note: For easier cleaning, you can use a microcassette cleaner kit, which includes a special cleaning cassette. Your local RadioShack store carries a full line of cassette deck cleaning supplies.

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SPECIFICATIONS

Tape Type .... Microcassette

Tracks .... 2 Tracks, 1 Channel Monaural

Drive System .... Capstan Drive

Tape Speed ... 2.4 cm/sec. (15/16 ips) and
1.2 cm/sec. (15/32 ips)

Recording Time
(with MC-60 Microcassette):
2.4 cm/sec. .... 30 min. per side
1.2 cm/sec. .... 60 min. per side

Practical Max. Output .... 200 mW

Frequency Response .... 400–4,000 Hz
at 2.4 cm/sec.

Fast Play:
2.4 cm/sec. .... +25%
1.2 cm/sec. .... +30%

Microphone Sensitivity .... Continuous
Adjustment Using **VOLUME**
in Record Mode

Power Sources:
Internal Batteries .... 3 Volts DC,
Two AA Batteries
AC Power .... 120V with AC Adapter
(Cat. No. 273-1654)

Vehicle Battery .... 12V with DC Adapter (Cat. No. 270-1560)

Typical Cassette Recording Time (with Alkaline Batteries) .... 17 Hours

Dimensions (HWD) .... $4.8 \times 2.5 \times 0.9$ in. ($122 \times 64 \times 24$ mm)

Weight (with batteries) .... 5.6 oz. (160 g)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

NOTES

Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. *(Continued)*

(Continued) New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, Dept. W,
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